

IN THE CLAIMS:

Please AMEND claims 8 and 13 and CANCEL claims 1-7 and 18-23 without prejudice so that the claims read as follows:

1-7 (Canceled).

8. (Currently Amended) A method of unloading a substrate carrier from a moving conveyor, comprising:

transporting a substrate carrier via a conveyor that moves past an arm having an end effector coupled to the arm;

about a horizontal axis, rotating ~~an~~ the ~~arm having an end effector couple thereto;~~

substantially matching a velocity of the end effector to a velocity at which the substrate carrier is transported by the moving conveyor;

contacting the substrate carrier with the end effector; and

lifting the substrate carrier from the conveyor.

9. (Original) The method of claim 8, further comprising:

constraining the end effector to have a fixed orientation as the arm rotates.

10. (Original) The method of claim 9, wherein:

the end effector comprises a cup-shaped end effector;

and

the fixed orientation of the end effector is such that an open side of the cup-shaped end effector is oriented upwardly.

11. (Original) The method of claim 8, wherein the substrate carrier is in a vertical orientation during the transporting step.

12. (Original) The method of claim 8, wherein the substrate carrier is a single substrate carrier.

13. (Currently Amended) A method of loading a substrate carrier onto a moving conveyor, comprising:
supporting a substrate carrier via an end effector coupled to a rotatable arm;
about a horizontal axis, rotating the arm;
substantially matching a velocity of the end effector to a velocity at which the conveyor moves past the arm; and
lowering the substrate carrier onto the conveyor while continuing to substantially match the velocity of the end effector to the velocity of the conveyor.

14. (Original) The method of claim 13, further comprising:
constraining the end effector to have a fixed orientation as the arm rotates.

15. (Original) The method of claim 14, wherein:
the end effector comprises a cup-shaped end effector;
and
the fixed orientation of the end effector is such that an open side of the cup-shaped end effector is oriented upwardly.

16. (Original) The method of claim 13, wherein the substrate carrier is in a vertical orientation during the supporting step.

17. (Original) The method of claim 13, wherein the substrate carrier is a single substrate carrier.

18-23 (Canceled).